IFWO

RAW SEQUENCE LISTING DATE: 09/03/2004
PATENT APPLICATION: **US/10/719,310** TIME: 15:19:36

Input Set : **A:\P1979R1Sequence.txt**
Output Set: **N:\CRF4\09032004\J719310.raw**

<110> APPLICANT: Brunetta, Paul G.
Sliwkowski, Mark X.
<120> TITLE OF INVENTION: THERAPY OF NON-MALIGNANT DISEASES OR DISORDERS WITH ANTI-ERBB2 ANTIBODIES
<130> FILE REFERENCE: P1979R1
<140> CURRENT APPLICATION NUMBER: US 10/719,310
<141> CURRENT FILING DATE: 2003-11-21
<150> PRIOR APPLICATION NUMBER: US 60/428,027
<151> PRIOR FILING DATE: 2002-11-21
<160> NUMBER OF SEQ ID NOS: 13

<210> SEQ ID NO: 1
<211> LENGTH: 107
<212> TYPE: PRT
<213> ORGANISM: Mus Musculus
<400> SEQUENCE: 1

```
 Asp Thr Val Met Thr Gln Ser His Lys Ile Met Ser Thr Ser Val
   1               5                  10                  15
 Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Ser
                  20                  25                  30
 Ile Gly Val Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Lys
                  35                  40                  45
 Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp
                  50                  55                  60
 Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
                  65                  70                  75
 Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
                  80                  85                  90
 Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu
                  95                 100                 105
 Ile Lys
```

<210> SEQ ID NO: 2
<211> LENGTH: 119
<212> TYPE: PRT
<213> ORGANISM: Mus musculus
<400> SEQUENCE: 2

```
 Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly
   1               5                  10                  15
 Thr Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr
                  20                  25                  30
 Asp Tyr Thr Met Asp Trp Val Lys Gln Ser His Gly Lys Ser Leu
                  35                  40                  45
 Glu Trp Ile Gly Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr
                  50                  55                  60
```

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```
 71  Asn Gln Arg Phe Lys Gly Lys Ala Ser Leu Thr Val Asp Arg Ser
 72                  65                  70                  75
 74  Ser Arg Ile Val Tyr Met Glu Leu Arg Ser Leu Thr Phe Glu Asp
 75                  80                  85                  90
 77  Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr
 78                  95                 100                 105
 80  Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
 81                 110                 115
 83 <210> SEQ ID NO: 3
 84 <211> LENGTH: 107
 85 <212> TYPE: PRT
 86 <213> ORGANISM: Artificial Sequence
 88 <220> FEATURE:
 89 <223> OTHER INFORMATION: sequence is synthesized
 91 <400> SEQUENCE: 3
 92  Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 93    1               5                  10                  15
 95  Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Ser
 96                  20                  25                  30
 98  Ile Gly Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 99                  35                  40                  45
101  Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Ser
102                  50                  55                  60
104  Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
105                  65                  70                  75
107  Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
108                  80                  85                  90
110  Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu
111                  95                 100                 105
113  Ile Lys
116 <210> SEQ ID NO: 4
117 <211> LENGTH: 119
118 <212> TYPE: PRT
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: sequence is synthesized
124 <220> FEATURE:
W--> 125 <221> NAME/KEY: artificial
126 <222> LOCATION: 1-119
127 <223> OTHER INFORMATION: Fab 574 VH
129 <400> SEQUENCE: 4
130  Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
131    1               5                  10                  15
133  Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr
134                  20                  25                  30
136  Asp Tyr Thr Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
137                  35                  40                  45
139  Glu Trp Val Ala Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr
140                  50                  55                  60
```

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```
142  Asn Gln Arg Phe Lys Gly Arg Phe Thr Leu Ser Val Asp Arg Ser
143                  65                  70                  75
145  Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
146                  80                  85                  90
148  Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr
149                  95                 100                 105
151  Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
152                 110                 115
154 <210> SEQ ID NO: 5
155 <211> LENGTH: 107
156 <212> TYPE: PRT
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <223> OTHER INFORMATION: sequence is synthesized
162 <400> SEQUENCE: 5
163  Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
164    1               5                  10                  15
166  Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
167                  20                  25                  30
169  Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
170                  35                  40                  45
172  Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
173                  50                  55                  60
175  Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
176                  65                  70                  75
178  Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
179                  80                  85                  90
181  Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
182                  95                 100                 105
184  Ile Lys
187 <210> SEQ ID NO: 6
188 <211> LENGTH: 119
189 <212> TYPE: PRT
190 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: sequence is synthesized
195 <400> SEQUENCE: 6
196  Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
197    1               5                  10                  15
199  Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
200                  20                  25                  30
202  Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
203                  35                  40                  45
205  Glu Trp Val Ala Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
206                  50                  55                  60
208  Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
209                  65                  70                  75
211  Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
212                  80                  85                  90
```

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Input Set : **A:\P1979R1Sequence.txt**
Output Set: **N:\CRF4\09032004\J719310.raw**

```
     214  Thr Ala Val Tyr Tyr Cys Ala Arg Gly Arg Val Gly Tyr Ser Leu
     215                   95                  100                 105
     217  Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
     218                  110                 115
     220 <210> SEQ ID NO: 7
     221 <211> LENGTH: 10
     222 <212> TYPE: PRT
     223 <213> ORGANISM: Mus musculus
     225 <220> FEATURE:
     226 <221> NAME/KEY: unsure
     227 <222> LOCATION: 10
     228 <223> OTHER INFORMATION: unknown amino acid
     230 <400> SEQUENCE: 7
W--> 231  Gly Phe Thr Phe Thr Asp Tyr Thr Met Xaa
     232    1               5                  10
     234 <210> SEQ ID NO: 8
     235 <211> LENGTH: 17
     236 <212> TYPE: PRT
     237 <213> ORGANISM: Mus musculus
     239 <400> SEQUENCE: 8
     240  Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr Asn Gln Arg Phe
     241    1               5                  10                  15
     243  Lys Gly
     246 <210> SEQ ID NO: 9
     247 <211> LENGTH: 10
     248 <212> TYPE: PRT
     249 <213> ORGANISM: Mus musculus
     251 <400> SEQUENCE: 9
     252  Asn Leu Gly Pro Ser Phe Tyr Phe Asp Tyr
     253    1               5                  10
     255 <210> SEQ ID NO: 10
     256 <211> LENGTH: 11
     257 <212> TYPE: PRT
     258 <213> ORGANISM: Mus musculus
     260 <400> SEQUENCE: 10
     261  Lys Ala Ser Gln Asp Val Ser Ile Gly Val Ala
     262    1               5                  10
     264 <210> SEQ ID NO: 11
     265 <211> LENGTH: 7
     266 <212> TYPE: PRT
     267 <213> ORGANISM: Mus musculus
     269 <220> FEATURE:
     270 <221> NAME/KEY: unsure
     271 <222> LOCATION: 5-7
     272 <223> OTHER INFORMATION: unknown amino acid
     274 <400> SEQUENCE: 11
W--> 275  Ser Ala Ser Tyr Xaa Xaa Xaa
     276    1               5
     278 <210> SEQ ID NO: 12
```

RAW SEQUENCE LISTING DATE: 09/03/2004
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Input Set : **A:\P1979R1Sequence.txt**
Output Set: **N:\CRF4\09032004\J719310.raw**

```
279 <211> LENGTH: 9
280 <212> TYPE: PRT
281 <213> ORGANISM: Mus musculus
283 <400> SEQUENCE: 12
284  Gln Gln Tyr Tyr Ile Tyr Pro Tyr Thr
285    1               5
287 <210> SEQ ID NO: 13
288 <211> LENGTH: 645
289 <212> TYPE: PRT
290 <213> ORGANISM: human
292 <400> SEQUENCE: 13
293  Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu
294    1               5                  10                  15
296  Leu Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp
297                   20                  25                  30
299  Met Lys Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met
300                   35                  40                  45
302  Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu
303                   50                  55                  60
305  Glu Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln
306                   65                  70                  75
308  Asp Ile Gln Glu Val Gln Gly Tyr Val Leu Ile Ala His Asn Gln
309                   80                  85                  90
311  Val Arg Gln Val Pro Leu Gln Arg Leu Arg Ile Val Arg Gly Thr
312                   95                 100                 105
314  Gln Leu Phe Glu Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn Gly
315                  110                 115                 120
317  Asp Pro Leu Asn Asn Thr Thr Pro Val Thr Gly Ala Ser Pro Gly
318                  125                 130                 135
320  Gly Leu Arg Glu Leu Gln Leu Arg Ser Leu Thr Glu Ile Leu Lys
321                  140                 145                 150
323  Gly Gly Val Leu Ile Gln Arg Asn Pro Gln Leu Cys Tyr Gln Asp
324                  155                 160                 165
326  Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn Asn Gln Leu Ala
327                  170                 175                 180
329  Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys His Pro Cys
330                  185                 190                 195
332  Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser Ser Glu
333                  200                 205                 210
335  Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys Ala
336                  215                 220                 225
338  Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
339                  230                 235                 240
341  Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys
342                  245                 250                 255
344  Leu His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala
345                  260                 265                 270
347  Leu Val Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro
348                  275                 280                 285
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/03/2004
PATENT APPLICATION: **US/10/719,310** TIME: 15:19:37

Input Set : **A:\P1979R1Sequence.txt**
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 10
Seq#:11; Xaa Pos. 5,6,7

VERIFICATION SUMMARY DATE: 09/03/2004
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L:125 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0